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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,109	07/23/2001	Tatsushi Nashida	450100-03355	4003

20999 7590 05/23/2005

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NEW YORK, NY 10151

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/911,109

Applicant(s)

NASHIDA ET AL.

Examiner

James S. Wozniak

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. In response to the office action from 9/7/2004, the applicant has submitted an amendment, filed 12/6/2004, amending Claims 1, 25, and 49, while adding Claim 52 and arguing to traverse the art rejection based on the limitation regarding an ambient state generating means (*Amendment, Page 20*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Yamamoto (*U.S. Patent: 5,923,337*).

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 9, 11, 21, 25-27, 30, 33, 35, 45 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al (*U.S. Patent: 5,983,190*) in view of Yamamoto (*U.S. Patent: 5,923,337*).

With respect to Claims 1, 25, and 49, Trower discloses:

An assistant control means for generating a personified assistant and making said assistant appear on a screen of said display unit (*Fig. 2, Element 60*);

An output speech control means for determining speech required for said assistant to output said assistant's speech to the outside through said speech output unit after speech synthesis (*determining an appropriate response to a speech input and performing speech synthesis, Col. 23, Lines 36-60; and speakers, Col. 4, Lines 20-34*);

An input speech recognition means for recognizing user's voice as a speech inputted through said speech input unit (*recognition engine for recognizing a speech input, Col. 6, Line 62- Col. 7, Line 12, and Fig. 3, Element 118*);

An interaction management means for managing interaction between said assistant and said user according to said assistant's speech determined by said output speech control means and said user speech recognized by said input speech recognition means (*maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*); and

A command interpreting means for specifying a user's intention or specifying said inputted user command based on a content of interaction traced by said interaction management means (*spoken command recognition and maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*).

Trower also discloses a computer readable medium for storage of a program implementing the above method (*Col. 4, Lines 8-19*).

Trower fails to explicitly teach or fairly suggest generating an ambient state enabling a animated personified assistant to make motions in a proper way or act as if urging the user to input speech commands when an interactive system is in a waiting state, however Yamamoto teaches such an ambient state generating means (*eyebrow raising, foot tapping, etc., Col. 14, Line 32- Col. 15, Line 3*).

Trower and Yamamoto are analogous art because they are from a similar field of endeavor in interactive speech dialog systems having animated characters. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Trower with the means of generating appropriate animations when a interactive speech system is in a waiting state as taught by Yamamoto to prevent an animated character from appearing lifeless during the absence of speech (*Yamamoto, Col. 14, Lines 55-57*).

With respect to **Claims 2 and 26**, Trower recites:

Assistant control means determines an animation of said assistant based on a content of interaction managed by said interaction management means and/or an inputted user command specified by said command interpreting means (*playing an animation for a current command based upon a state resulting from a previous command, Col. 24, Lines 25-34, and a maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*).

With respect to **Claims 3 and 27**, Trower discloses:

Output speech control means determines an assistant's speech based on a content of interaction managed by said interaction management means and/or an inputted user command specified by said command interpreting means (*selection of an appropriate speech output in response to a user command, Col. 23, Lines 36-60, and a maintained list of available commands for interaction, Col. 27, Line 5- Col. 28, Line 29*).

With respect to **Claims 6 and 30**, Trower shows:

Communication means for connecting said system to a communication medium such as an external network or a telephone line (*Fig. 11, Element 454*), wherein said input speech recognition means recognizes audio data received via said communication medium (*server,*

*linked to multiple clients, featuring a speech recognition engine, Fig. 3, Element 118, and Col. 6, Line 62- Col. 7, Line 12).*

With respect to **Claims 9 and 33**, Trower shows:

Personified assistant is placed in a room scattered with various kinds of objects including a link to an information resource (*Fig. 2, and Internet browser in a desktop space containing an animated character, Col. 4, Lines 54-67*).

With respect to **Claims 11 and 35**, Trower recites:

Upon the command interpreting means interpreting an inputted user command, said assistant control means makes said assistant appear on a screen of said display unit (*request for opening a character file, Col. 13, Lines 21-43*).

With respect to **Claims 21 and 45**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character, as applied to Claims 1 and 25. Trower in view of Yamamoto does not specifically suggest Kanji to Kana text conversion, however the examiner takes official notice that it is well known in the art to perform Kanji to Kana text conversion in order to simplify Japanese text for a user that may not be familiar with the complex Kanji character set. Therefore, it obvious to implement kanji-to-kana conversion of displayed text in order to simplify Japanese text for a user unfamiliar with the complex Kanji character set.

**Claims 50 and 51** contain subject matter similar to Claims 21 and 45, and thus, are rejected for the same reasons.

With respect to **Claim 52**, Yamamoto additionally discloses:

The motions or act include a leading question (*eyebrow raising which is a questioning gesture, Col. 14, Line 32- Col. 15, Line 3*).

4. **Claims 4, 5, 12, 13, 15, 17, 19, 22-24, 28, 29, 36, 37, 39, 41, 43, and 46-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Yamamoto, and in further view of Houser et al (*U.S. Patent: 5,774,859*).

With respect to **Claims 4 and 28**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character, as applied to Claims 1 and 25. Trower does not specifically suggest providing user guidance if a command recognition error occurs; however Houser recites:

Control means determines speech for leading a user's intention when said command interpreting means fails to specify said user's intention or said inputted user command (*prompting a user to select an intended channel upon the occurrence of a command recognition error, Col. 19, Lines 27-60*).

Trower, Yamamoto, and Houser are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of prompting a user upon the occurrence of a command recognition error as taught by Houser with the speech command interface system and method utilizing an interactive animated character taught by Trower in view of Yamamoto in order to recognize a user command even if the system is unable to determine a proper recognition result, thus improving command detection capability. Therefore, it would

have been obvious to combine Houser with Trower in view of Yamamoto for the benefit of improving command detection capability.

With respect to **Claims 5 and 29**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character, as applied to Claims 1 and 25. Trower in view of Yamamoto does not teach the interpretation of a specific command for selecting a TV channel or recording a television program, however Houser discloses:

Command interpreting means also interprets a command for controlling a function of said external apparatus including selection of a broadcast program channel and/or recording/reproducing of said broadcast program (*Col. 30, Lines 26-42*).

Trower, Yamamoto, and Houser are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of recognizing commands related to TV channel selection and program recording as taught by Houser with the speech command interface system and method utilizing an interactive animated character as taught by Trower in view of Yamamoto to increase speech command system functionality and usability by further adding the ability to perform and simplify common television related tasks (*Houser, Col. 1, Line 59- Col. 2, Line 16*). Therefore, it would have been obvious to combine Houser with Trower in view of Yamamoto for the benefit of increasing speech command system functionality by adding the ability to perform common television related tasks.

With respect to **Claims 12 and 36**, Houser further discloses:



In response to said command interpreting means interpreting an inputted user command as a channel selection command, control means shows a selected broadcasting program in a display window (*channel information and selection commands, Col. 25, Line 38- Col. 26, Line 6*).

With respect to **Claims 13 and 37**, Trower in view of Yamamoto, and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus, as applied to Claims 12 and 36. Trower in view of Yamamoto, and further in view of Houser does not suggest that the menus are ring shaped and placed around the animated character, however, it would have been obvious matter of design choice to utilize a ring shaped menu for channel selection, since the applicant has not disclosed that utilizing such a menu solves any stated problem or provides for any particular functional improvement from other types of menu based systems such as the matrix-based menu system as shown by Houser in Fig. 11. Therefore it would have been obvious to utilize a ring shaped menu for speech-enabled channel selection to provide an aesthetically pleasing user interface.

With respect to **Claims 15 and 39**, Trower in view of Yamamoto, and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 12 and 36. Trower in view of Yamamoto, and further in view of Houser does not suggest that the menus containing program information are shown in a binder on a display, however, it would have been obvious matter of design choice to utilize a menu shown in a binder for the display of program information, since the applicant has not

disclosed that utilizing such a binder solves any stated problem or provides for any particular functional improvement from other types of menu based systems such as the matrix-based menu system as shown by Houser in Fig. 11. Therefore it would have been obvious to utilize a program information menu shown in a binder for speech-enabled program selection to provide an aesthetically pleasing user interface.

With respect to **Claims 17 and 41**, Houser additionally recites:

In response to said command interpreting means interpreting an inputted user command as a channel change command, said assistant control means makes said assistant appear with a list of changeable broadcasting programs arranged in a matrix shape (*viewing guide menu command used for channel selection, Col. 25, Line 33- Col. 26, Line 6, and Fig. 11*).

With respect to **Claims 19 and 43**, Houser further discloses:

EPG distributed as part of data broadcast is applied for generating a list of broadcasting programs in a matrix form (*Col. 25, Lines 33-64*).

With respect to **Claims 22 and 46**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character, as applied to Claims 1 and 25. Trower in view of Yamamoto does not specifically suggest client authorization means, however, Houser discloses:

Communication means for connecting said system to a communication medium such as an external network or a telephone line, and a certifying means for certifying an information terminal connected to said system via said communication medium (*Fig. 2A, and EPG access authorization, Col. 25, Lines 33-37*).

Trower, Yamamoto, and Houser are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the user authorization means taught by Houser with the speech command interface system and method utilizing an interactive animated character as taught by Trower in view of Yamamoto to prevent unauthorized users from accessing customer services provided by a speech enabled command system. Therefore, it would have been obvious to combine Houser with Trower in view of Yamamoto for the benefit of providing only authorized users with speech command system access.

With respect to **Claims 23, 24, 47, and 48**, Houser discloses the viewing guide that displays program information as applied to Claims 17 and 41 and shown in Fig. 11.

5. **Claims 7, 8, 20, 31, 32, and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Yamamoto, and further in view of Lumelsky et al (*U.S. Patent: 6,081,780*).

With respect to **Claims 7 and 31**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character, as applied to Claims 1 and 25. Trower also teaches the ability to access email utilizing a speech command (*Col. 28, Lines 20-29, and network connection, Fig. 11, Element 454*), but does not specifically suggest that the animated character recites the content of a received email using a speech output means. However, Lumelsky discloses:

Communication means for connecting said system to a communication medium such as an external network and/or a telephone line, and a mail exchange means for making an exchange

of electronic mails via said communication medium, wherein said output speech control means determines said assistant's speech based on a content of an incoming mail (*user request for speech synthesis of e-mails, Col. 20, Line 65- Col. 21, Line 16*).

Trower, Yamamoto, and Lumelsky are analogous art because they are from a similar field of endeavor in speech-controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the ability to synthesize a received email as taught by Lumelsky with the speech command interface system and method utilizing an interactive animated character taught by Trower in view of Yamamoto to provide an alternate means of conveniently accessing email contents when a user does not have a continual view of a display. Therefore, it would have been obvious to combine Lumelsky with Trower in view of Yamamoto for the benefit of providing an alternate means of conveniently accessing email contents.

With respect to **Claims 8 and 32**, Lumelsky further discloses:

Interaction management means manages an input speech of a user as a message bound for another user, and said output speech control means determines said assistant's speech based on said message (*playback of a voice mail attached to an email in response to a speech command, Col. 20, Line 58- Col. 21, Line 16*).

With respect to **Claims 20 and 44**, Trower in view of Yamamoto, and further in view of Lumelsky teaches the speech command interface system and method utilizing an interactive animated character capable of accessing and synthesizing e-mail messages, as applied to Claims 7 and 31. Trower in view of Yamamoto, and further in view of Lumelsky does not specifically suggest displaying a new or incoming mail icon in response to the acceptance of mail; however,

the examiner takes official notice that it is well known in the art to implement a visual means of representing a new e-mail so that a user can recognize new and unread e-mails. Therefore it would have been obvious to implement a visual means of representing a new e-mail in the speech command system capable of accessing and synthesizing electronic mail messages taught by Trower in view of Lumelsky, so that a user can easily recognize new and unread e-mails.

6. **Claims 10 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Yamamoto, and further in view of Crow et al (*U.S. Patent: 6,262,724*).

With respect to **Claims 10 and 34**, Trower in view of Yamamoto teaches the speech command interface system and method utilizing an interactive animated character located in a desktop space, as applied to Claims 9 and 33. Trower in view of Yamamoto does not teach the display of a link containing musical content in the display space, however Crow discloses:

Assistant control means places said personified assistant in a room scattered with various kinds of objects including a link to an information resource, and in response to an interest of said user in a recording medium including a link to a music content placed in said room, said command interpreting means interprets an inputted user command as a command for playing back said music content (*media files capable of being located on a desktop, Col. 9, Lines 52-56, and speech control of a media player, Col. 8, Line 55- Col. 9, Line 25*).

Trower, Yamamoto, and Crow are analogous art because they are from a similar field of endeavor in speech-controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the speech enabled media player taught by Crow with the speech command interface system and method utilizing an interactive

animated character located in a desktop space taught by Trower in view of Yamamoto in order to increase speech command system functionality and usability by further adding the ability to play audio files using a speech-controlled media player. Therefore, it would have been obvious to combine Crow with Trower in view of Yamamoto for the benefit of increasing speech command system and method usability.

7. **Claims 14, 16, 18, 38, 40, and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Trower et al in view of Yamamoto, in further view of Houser et al, and yet further in view of Florin et al (*U.S. Patent: 5,583,560*).

With respect to **Claims 14, 16, 18, 38, 40, and 42**, Trower in view of Yamamoto, and further in view of Houser teaches the speech command interface system and method utilizing an interactive animated character and featuring speech-initiated TV channel selection menus containing program information, as applied to Claims 13, 15, 17, 37, 39, and 41. Trower in view of Yamamoto, and further in view of Houser does not teach the ability to zoom in on a selected channel, however Florin discloses a picture-in-picture window with the ability to jump to (zoom in on) the channel displayed in the window (*Col. 17, Lines 41-59, voice command means, Col. 12, Lines 59-67, and Figs. 20 and 21*).

Trower, Yamamoto, Houser, and Florin are analogous art because they are from a similar field of endeavor in speech controlled systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to combine the means of zooming in on a channel feature in a picture-in-picture window as taught by Florin with the speech command interface system and method utilizing an interactive animated character and featuring speech-

initiated TV channel selection menus containing program information as taught by Trower in view of Yamamoto, and further in view of Houser to provide a convenient speech-enabled means of previewing and accessing a selected television channel, thus increasing system functionality. Therefore it would have been obvious to combine Florin with Trower in view of Yamamoto, and further in view of Houser for the benefit of increasing speech command system functionality by providing a speech-enabled means of previewing and accessing a selected television channel.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2655

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Merrick et al (*U.S. Patent: 6,433,784*)- teaches an interactive speech system that features displayed character gestures in response to a silence period.


Prevost et al (*U.S. Patent: 6,570,555*)- teaches conversational animated characters that respond to user pauses with inquisitive gestures.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak  
4/1/2005

  
DAVID L. OMETZ  
PRIMARY EXAMINER